

IN THE CLAIMS:

Claims 1-10 (cancelled).

11. (new) A vehicle tire with a body made of an elastic material, preferably rubber or polyurethane provided with a crown portion containing the running surface, two sidewalls joined via shoulder portions to the crown portion and ending in beads, and with leaf springs running radially from the one bead to the other side by side in specified distances, and the beads are clamped into a wheel rim, characterized in that the leaf springs are embedded into the body of elastic material at least along the crown portion and the beads, where the leaf springs are provided with inwardly bent leaf spring ends embedded into the beads, and the contour of the leaf springs from the one bead to the other bead is semi-elliptical, which in the orthogonal coordinate system with X and Y axes can be described in the angle range of $0 \leq t \leq \pi$ by coordinates $x = a \cos t$ and $y = b \sin t$, where the semi-ellipse falls inside the range determined by the ellipses corresponding to the following relationship:

$$\frac{7}{8}a \geq b \geq \frac{1}{2}a$$

where

a is the half of the large axis of the ellipse

b is the half of the small axis of the ellipse.

12. (new) The vehicle tire of claim 11 wherein the semi-elliptical contour of leaf springs corresponds to the following equation:

$$b \approx \frac{2}{3}a$$

13. (new) The vehicle tire of claim 11 wherein the leaf springs are multilayered leaf springs comprising a number of spring plates.

14. (new) The vehicle tire of claim 11 wherein the angle (α) between the inwardly bent leaf spring ends of the leaf springs and the X axis of the orthogonal coordinate system is about 10° , preferably at least 8° .

15. (new) The vehicle tire of claim 14 wherein the length of the inwardly bent leaf spring ends of the leaf springs is at least 10 mm, and the said angle (α) of leaf spring ends is identical to the angle between the part of the wheel rim fitting to the leaf spring ends and the rotation axis of the wheel rim.

16. (new) The vehicle tire of claim 11 wherein the distance between the leaf springs in the crown portion is at least 10 mm.

17. (new) The vehicle tire of claim 11 wherein the leaf spring ends of leaf springs in the side view are bent into a horizontal C-shape, and in the nest of this C-shape bead-ring is embedded into the rubber body of the beads.

18. (new) The vehicle tire of claim 11 wherein the surface of the leaf springs is treated with a material facilitating adhesion to the rubber.

19. (new) The vehicle tire of claim 11 wherein the leaf springs are covered by a rubbered strengthening material under the running surface.

20. (new) The vehicle tire of claim 11 wherein the leaf springs and belt inserts are situated provided with some strengthening material.